10/791,996

PATENT

ATTORNEY DOCKET No.:

FA1013 US DIV

1792

GROUP ART UNIT

This listing of claims replaces all prior versions and listings of claims in the application.

IN THE CLAIMS

1-10. (CANCELED)

- 11. (PREVIOUSLY PRESENTED) A process comprising applying a multi-layer coating on a substrate wherein the substrate is an automotive body or part having a color-imparting and/or special effect-imparting base coat and a coating agent applied thereon as a transparent clear coat and curing said coating; wherein the coating agent contains resin solids consisting of
 - (a) 10 wt-% to 80 wt-% of a non-aromatic polyester polyol,
 - (b) 30 wt-% to 60 wt-% of at least one constituent selected from the group consisting of hydroxyl-functional binders consisting of hydroxyl functional (meth)acrylate copolymer resins, hydroxyl functional polyurethane resins, hydroxyl functional polyester resins that are different from polyester polyol (a), hydroxyl-functional reactive thinners and combinations thereof, and
 - (c) 20 wt-% to 60 wt-% of at least one cross-linking agent for the hydroxyl-functional components (a) and (b),

wherein the polyester polyol (a) is a branched structure having a calculated molecular mass from 600 to 1400, an acid value from 0 to 30 mg KOH/g and a hydroxyl value from 250 to 600 mg KOH/g with a calculated hydroxyl functionality from 4.5 to 10, and is composed of randomly positioned components consisting of

10/791,996

PATENT

ATTORNEY DOCKET No.:

FA1013 US DIV

1792

(a1) hydroxyl components comprising 100 wt-% of at least one (cyclo) aliphatic polyol having 3 to 6 hydroxyl groups, and

GROUP ART UNIT

(a2) carboxyl components comprising 100 wt-% of at least one dicarboxylic acid,

the sum of the percentages by weight of components (a) to (c), of components (a1) and of components (a2) being 100% in each case.

12. (PREVIOUSLY PRESENTED) A process for forming a coating layer as one coating layer of a multi-layer coating comprising:

applying to a substrate a coating layer comprising a coating agent and curing said coating layer, wherein the substrate is an automotive body or part having a color-imparting and/or special effect-imparting base coat and the coating agent applied thereon as a transparent clear coat;

wherein the coating agent contains resin solids consisting of

- (a) 10 wt-% to 80 wt-% of a non-aromatic polyester polyol,
- (b) 30 wt-% to 60 wt-% of at least one constituent selected from the group consisting of hydroxyl-functional binders consisting of hydroxyl functional (meth)acrylate copolymer resins, hydroxyl functional polyurethane resins, hydroxyl functional polyester resins that are different from polyester polyol (a), hydroxyl-functional reactive thinners and combinations thereof, and
- (c) 20 wt-% to 60 wt-% of at least one cross-linking agent for the hydroxylfunctional components (a) and (b).

wherein the polyester polyol (a) is a branched structure having a calculated molecular mass from 600 to 1400, an acid value from 0 to 30 mg KOH/g and a hydroxyl value from 250 to 600 mg KOH/g with a calculated hydroxyl

10/791,996

PATENT

ATTORNEY DOCKET No.:

FA1013 US DIV

1792

functionality from 4.5 to 10, and is composed of randomly positioned components consisting of

(a1) hydroxyl components comprising 100 wt-% of at least one polyol having 3 to 6 hydroxyl groups, and

GROUP ART UNIT

(a2) carboxyl components comprising 100 wt-% of at least one dicarboxylic acid,

the sum of the percentages by weight of components (a) to (c), of components (a1) and of components (a2) being 100% in each case.

13-15. (CANCELED)

16. (PREVIOUSLY PRESENTED) The process according to claim 12, wherein the polyester polyol (a) comprises 30 wt-% to 60 wt-% of at least one hydroxyl component (a1), 30 wt-% to 70 wt-% of at least one carboxyl component (a2).

17-18. (CANCELED)

- 19. (PREVIOUSLY PRESENTED) The process according to claim 12, wherein the polyester polyol (a) comprises dimer fatty acid as one of at least two dicarboxylic acids of the carboxyl component (a2) corresponding to a weight ratio from 5 wt-% to 45 wt-% of dimer fatty acid and 55 wt-% to 95 wt-% of at least one additional dicarboxylic acid.
- 20. (ORIGINAL) The process according to claim 12, wherein the cross-linking agent(c) is selected from the group consisting of aminoplastic resins, free

10/791,996

PATENT

ATTORNEY DOCKET No.:

FA1013 US DIV

1792

polyisocyanates, blocked polyisocyanates, transesterification cross-linking agents or combinations thereof.

GROUP ART UNIT

21. (PREVIOUSLY PRESENTED) The process according to claim 12, wherein the coating agent selected from the group consisting of aqueous coating agents and coating agents based on organic solvents.